REMARKS

Claims 1-4 and 15 are pending. Applicant has amended claims 1 and 15 herein. Applicant has cancelled the non-elected claims at the Examiner's request and reserves the right to pursue these claims in a future application.

The Examiner rejected claim 15 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter, because the recited computer-readable medium could be a communication medium, such as a carrier wave. Applicant has amended claim 15 to recite a "computer-readable <u>storage</u> medium." Applicant's specification differentiates a communication medium from a storage medium[1]. Applicant respectfully submits that claim 15 as amended meets the requirements of 35 U.S.C. § 101, and thus is directed to statutory subject matter. Accordingly, applicant respectfully requests that this rejection be withdrawn.

The Examiner rejected claims 1-4 under 35 U.S.C. § 103(a) over Baugher ("The Secure Real-time Transport Protocol") in view of Minhazuddin (2004/0073641) and claim 15 over Bontempi (2002/0150092) in view of Baugher. Applicant respectfully traverses these rejections.

In response to applicant's previous arguments, the Examiner indicated that "the features upon which applicant relies (i.e., handling the routing of RTP packets when the destination address and port are not unique) are not recited in the rejected claim(s)." Office Action, October 19, 2007, p.3. Although applicant believes that this attribute was implicit in the previous claim language, applicant has nevertheless amended the claims to explicitly recite "the destination address and destination port of multiple receiving network clients are not unique from the perspective of a sending client." None of the references relied upon by the Examiner describes or handles the situation of a receiving client behind

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[1] Applicant notes that whether data signals are patentable subject matter is currently being disputed in the courts. Applicant reserves the right to reintroduce claims directed to communication media in the future.

a firewall in which the destination address and port of multiple receiving clients are not unique.

Baugher describes a protocol, called SRTP, for securing communications sent in accordance with the Real-time Transport Protocol (RTP). Like RTP itself, SRTP relies on a unique destination address and port for each receiving client. Baugher states, "[a] cryptographic context SHALL be uniquely identified by the triplet context identifier: context id = <SSRC, destination network address, destination transport port number>" and "[i]t is assumed that, when presented with this information, the key management returns a context with the [cryptographic context] information." Baugher, p. 9. However, in many situations, particularly where firewalls are involved, the number of available destination ports is severely limited such that it is not possible or desirable to assign each receiving client a unique destination port. Thus, the assumption stated in Baugher does not hold true for these situations because a destination address and port are insufficient to uniquely identify a particular context, even if combined with the SSRC value. Baugher does not address these situations and contains no teaching or suggestion of a method of handling the routing of RTP packets when the destination address and port are not unique.

Similarly, Bontempi is directed to situations where each receiving client has a unique destination address and port that are used for routing: "UDP port 102 is reserved for one-to-one communication" and "[t]he leading packet 71 is routed to the U-UPF1 on the basis of the destination address." Bontempi, paragraphs [0067] and [0069]. The Examiner points to paragraph [0080] of Bontempi as routing packets exclusively according to the SSRC value in the RTP packet. However, the Examiner ignores the portion of Bontempi that describes how the destination address is first used to route the packets. As noted above with respect to Baugher, the SSRC is always a component of a triplet for uniquely identifying a stream. However, the SSRC alone is generally insufficient to uniquely identify a particular receiving client. As illustrated in Figure 7 of Bontempi, each device in the communication has a unique address and port. No two devices share an address and

port, and Bontempi contains no teaching or suggestion of a method of handling the routing of RTP packets when the destination address and port are not unique.

In contrast, applicant's technology is directed to routing secure RTP traffic in an environment where destination ports are limited, such as a firewall. A firewall may contain a single IP address that is shared by many receiving clients. From a sender's point of view outside of the firewall, each of the receiving clients has the same destination address. If the firewall only allows RTP communications to be received on a particular port, then each of the receiving clients also appears to the sender to have the same destination port. Thus, when a packet is received at the firewall, there is no way provided by RTP for the firewall to determine which receiving client should receive the packet. Applicant's technology observes that the sender's information can be made unique in these situations, and uses the sender's information to determine which receiving client should receive the packet.

In the embodiments of claims 1-4, applicant's technology distinguishes receiving clients based on the sender's source information in the RTP header. Claim 1 recites "determining whether a sending client's Security Association (SA) exists using the sender's source information included in the RTP message header" and "forwarding the packet to a receiving network client identified based on the <u>sender's</u> source information." In the embodiment of claim 15, applicant's technology distinguishes receiving clients based on a sender-provided Synchronization Source Identifier (SSRC). Whereas the SSRC value is typically chosen at random and need only be unique across the streams of a particular session, applicant's technology may, for example, manage SSRC values such that they are unique across multiple sessions. Claim 15 recites "wherein a receiving media relay server determines a receiving client associated with the data structure based on the unencrypted Synchronization Source Identifier without identifying a unique port for the receiving client." Thus, each of applicant's pending claims describes distinguishing receiving clients without relying on a unique destination address and port.

As discussed above, Baugher assumes a unique destination address and port for each receiving client and does not teach or suggest distinguishing receiving clients on any other basis. Similarly, Bontempi assumes a unique destination address and port for each receiving client and does not teach or suggest distinguishing receiving clients on any other basis. The SSRC value in Bontempi is used for its original purpose as described in the SRTP specification of Baugher for distinguishing streams within a single session. Minhazuddin, relied upon by the Examiner for teaching decrypting packets at a server, also does not teach or suggest distinguishing receiving clients where each receiving client does not have a unique destination address and port. Therefore, applicant's claims are patentable over Baugher, Bontempi, and Minhazuddin both alone and in combination. Accordingly, applicant respectfully requests that these rejections be withdrawn.

Based upon these remarks and amendments, Applicants respectfully request reconsideration of this application and its early allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-3265.

Applicants believe all required fees are being paid in connection with this response. However, if an additional fee is due, please charge our Deposit Account No. 50-0665, under Order No. 418268874US from which the undersigned is authorized to draw.

Dated: 1/22/2008

Respectfully submitted,

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